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### G81-541 The Home Laying Flock, Part I *Getting Started*

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# The Home Laying Flock, Part I

## *Getting Started*

This NebGuide tells what is involved in starting a home laying flock.

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Home egg operations have maintained popularity in Nebraska. These small flocks provide a means for producing high quality food at home. They also provide the opportunity for young people to learn the responsibility of caring for animals. A well planned, well managed home flock can be a source of personal pleasure and sometimes a source of low-cost eggs.

In many areas, small flocks have disappeared and the larger, commercial-sized units have not replaced them. Therefore, many small towns and rural communities are without a supply of locally produced eggs. The eggs that rural families have available are not always of the quality they desire, nor are they available during certain seasons of the year. This provides an opportunity for some small flocks to be profitable.

This NebGuide tells what is involved in starting a home laying flock. NebGuide G81-542, *Home Laying Flock, Part II: Management*, covers other important management information. You will need a copy of both NebGuides.

### **Early Decisions**

The first decision is obvious--are you going to start a laying hen project? If the answer is yes, the second step is to find out if it is legal to raise a flock in your area. Inquire about local zoning laws and ordinances in your city or suburb. Rural residents usually do not have a problem unless a close neighbor objects. Let's assume you have decided to start the project and there are no legal problems. The next step is to decide what size flock you want.

Flock size will vary with each different situation. Starting at 20 weeks of age, a layer will produce 15 dozen or more eggs per year. At this rate, it will take four or five hens to furnish one person with two eggs per day. A family of four needs 16 to 20 layers to keep it supplied with eggs. There will be times when the flock will

produce more, and times when they may produce less. If you plan to sell eggs to neighbors or friends, as well as supply your own needs, the flock size will need to be increased by 16 to 20 hens for each family of four you have as customers.

Space available for poultry keeping and the method of starting the flock must also be considered when determining flock size. If the layer flock is started from day-old chicks, remember that approximately half of them will be cockerels unless they are sexed at the hatchery. Also allow for mortality during the growing period, which can be expected to run from five to 10 percent. A brooder house and facilities to grow the pullets to 20 weeks of age is required in addition to a laying house. *Brooder Houses and Equipment for the Home Flock*, (G80-530) is another NebGuide that might be helpful if you plan to raise day-old chicks for pullets. The laying house must be large enough to provide at least two square feet of floor space per hen for light breeds (3 to 4 lbs), and three square feet for the heavier ones (5 to 8 lbs). Overcrowding will decrease the number of eggs laid by each hen.

If you do not want to grow the birds, you can begin the laying project with started pullets. These are usually sold at 18 to 22 weeks of age. They are generally more expensive than raising your own and may be difficult to find. Your easiest source may be a neighbor or some individual that is willing to sell birds at that age. Some form of prearrangement is usually necessary. No one wants to raise pullets unless they need them or have an arranged market for the extras. Most commercial pullets are raised and sold by prior contract, and commercial growers normally do not sell small numbers to individuals. However, occasional surpluses do develop and they may sell them in small lots. This is not always a dependable supply for the home flock, but should not be ignored as a possibility. Any source of started pullets usually requires a minimum prearrangement time of 23 weeks. It takes three weeks to hatch the birds and approximately 20 weeks to grow them. If you do not give your supplier adequate time for your order, you may have to wait several weeks, or even months, to buy your pullets.

A third method of starting the layer flock is to use second-year layers. These can often be purchased from commercial egg producers who have already kept them through one production cycle. The first cycle usually lasts 14 months. By selecting good layers from these flocks, it is possible to obtain reasonably priced hens that may give several months of good egg production. Second-year layers will produce around 12 dozen eggs per hen per year. Therefore, to obtain the same number of eggs, it will take a few more hens than when you are starting with pullets. Don't buy hens that have been in production for longer than 14 to 15 months, or that have already been force-molted. Changing the environment and management practices of these hens may cause them to molt again, and you may go through a period of relatively low egg production until they are back in production. Good, healthy hens can be force-molted after they are moved. These hens will produce very few eggs for six to eight weeks, but soon return to good production with improved egg quality.

## **Breed Selection**

When eggs are your primary interest, choose a breed or strain that is bred for high egg production. The White Leghorn type of hybrid or strain cross is usually the best. There may be little choice in this matter if hens or pullets are purchased from commercial sources, but fortunately they will almost always be of the White Leghorn type. Dual purpose breeds such as the Rhode Island Red, New Hampshire and White Rocks have some of both egg and meat production qualities, but they aren't the best for either purpose. When meat is your primary interest, choose a breed or strain that is bred for meat production and grow meat production flocks.

## **Housing**

The home flock layer house does not need to be elaborate or expensive. The basic requirements are that it provides sufficient floor space, protection from weather and predators, and is well ventilated but free from drafts. A detailed discussion of these factors and drawings of houses that will do the job are presented in NebGuide G80-530, *Brooder Houses and Equipment for the Home Flock*. Your county Extension agent can provide you with a copy.

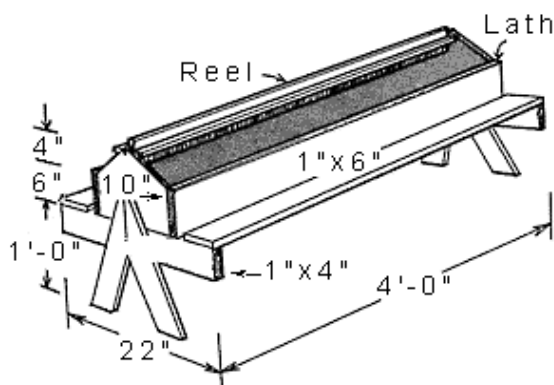
A house temperature range of 45° to 85°F is desirable for economy of egg production. Moisture and ammonia buildup is a common problem in laying houses and fresh air should be drawn in without excessive drafts on the hens. A well-insulated house with controlled ventilation, filled to capacity with hens (2 sq ft per hen for Leghorn type and 3 sq ft per hen for heavies) will provide the necessary body heat for maintaining a desirable winter egg production temperature range. Supplemental heating may be necessary during extreme cold periods. Crowding the birds can produce more body heat during the winter months, but may result in cannibalism and will make maintenance of good litter and air conditions in the house more difficult.

Laying hens can be raised and housed in cage facilities, but this management system is not widely practiced with home flocks. Cages can be installed in any small building or a shed-type building can be constructed especially for cages. If you are interested in cages, contact your county agent and he will put you in touch with someone that can help you design such a system.

## Equipment

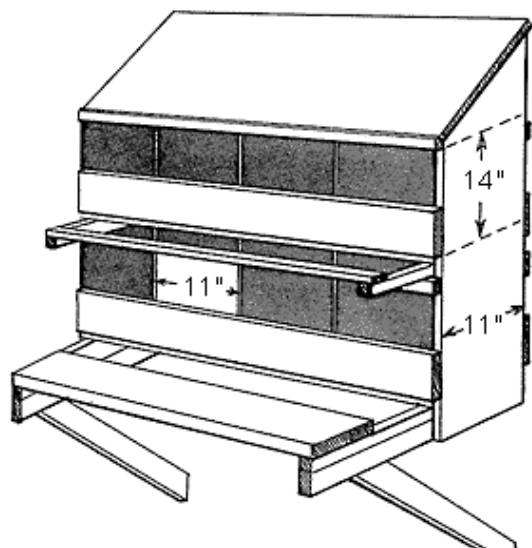
Feeders, waterers, nests and lights are necessary equipment for a laying flock. Besides these items, containers for granite grit and oyster shell and roosts might be included.

**Figure 1. Feeder for layer hens**



Provide at least three linear inches of feeder space per hen. One 4-foot trough, open on both sides, is enough for 25 to 30 layers. Trough-type feeders can be purchased from local feed and farm supply stores or from mail order houses (waterers and nests also), or may be constructed at home (*Figure 1*). Trough-type feeders should be equipped with reels to keep birds out of the trough. If tube-type hanging feeders are used, a 15-inch diameter pan will be adequate for up to 100 layers. The lip of the feeder should be level with the hens' backs.

Fresh, clean water should be available at all times. This might require a water heater for winter months or four or five trips to the hen house each day to remove ice and replenish with fresh water. If trough-type waterers are used, at least one linear inch of waterer space per layer is needed. If round, pan-type waterers are used, a capacity of two to three gallons of water for each 25 to 30 hens will provide enough water for 12 to 24 hours. Waterers should be adjusted to the same height as the feeders. They can be placed on wire platforms four to six inches high to help prevent wet litter and water contamination.



**Figure 2. Nest section**

An adequate number of well-constructed nests (*Figure 2*) will result in cleaner eggs and fewer broken ones. Provide an individual nest for every four layers. Nests can be arranged in the center of the house or along the walls. Hens prefer a darkened area for nesting. The nests should have perches below the entrance, with the lowest nest 18 to 20 inches above the floor. Keep clean nesting litter, such as wood shavings, in the nests at all times. Place nests in the house before hens start laying or they will develop the habit of laying on the floor. Once started, this habit is difficult to break.

It is not necessary to feed granite grit to layers unless they

are being fed whole grains. However, whole grain feeding is not a good practice. If a commercial layer ration is used, oyster shell is not needed but can be fed if the diet is low in calcium. Four linear inches of oyster shell hopper space is adequate for 25 layers. A 3-pound coffee can fastened to the wall makes an adequate grit or shell feeder.

Droppings boards or pits and roosts are not considered necessary, but they do help to prevent manure buildup in the litter. Roosts are usually placed over a droppings board or pit. Roost poles can be made from 2 × 2 inch pieces with the upper edges slightly rounded. Roost poles should be placed 14 to 15 inches apart and provide eight linear inches of space per hen. Roosts should be 16 to 24 inches above the floor with 1 × 2 inch welded wire below the roost to keep hens out of the droppings.

## **Lighting**

Lights are necessary for good egg production in the winter months. One 40-watt bulb 8 to 10 feet above the floor will provide enough light for 200 square feet of floor space. At about 21 weeks of age, pullets should receive an increase in day length to stimulate egg production. If the pullets were grown on 12 hours of light, increase the light to 13 hours immediately, and then increase it 15 minutes each week until 14 to 16 total hours of light per day are reached. Hold this constant. If second-year layers are used or if pullets have been grown on 14 hours of light per day, the length needs to be increased to 15 hours immediately. Add 15 minutes of light each week until 15 total hours are reached, and then hold constant.

Natural daylight reaches a maximum during June and then begins to decrease. Hens should not be exposed to a decreasing light-day. Artificial lights controlled with a time clock should be used to hold the light-day constant. Use either morning and evening lights, or both, to lengthen the light-day. The cost of lighting the layer house is very low and will result in higher egg production during the winter months when egg prices are usually the highest.

Ask your county agent for a copy of *The Home Laying Flock, Part II: Management (G81-542)* for additional information.

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